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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,173	10/06/2003	Seann Pavlik	4442-7	2282
23117	7590	09/01/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HWU, DAVIS D	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/678,173

Applicant(s)

PAVLIK, SEANN

Examiner

Davis D. Hwu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,13,20-24 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-12,14-19,25 and 26 is/are rejected.
- 7) ☒ Claim(s) 27-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

1. Applicant's amendment and arguments of August 15, 2005 are acknowledged and entered.
2. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 102***

4. Claims 1-3 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Marcus.

Marcus shows a method of cooling a space or living beings within the space, the space to be cooled defined at least in part by existing structural elements having primary functions unrelated to transport of cooling liquid but including at least one substantially rigid, elongated tubular element 30 defining a substantially liquid-tight passage comprising mounting at least one misting nozzle 34 in the tubular element 30 and supplying liquid under pressure to flow through the existing substantially liquid-tight passage so that the liquid is emitted through the nozzle as a mist as recited. The method is practiced using a hollow rigid canopy frame component on a watercraft as the rigid elongated tubular element as recited in claim 2.

5. Claims 4, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus in view of Kennedy et al.

Kennedy et al. teaches a method of cooling a space or living being within the space comprising at least one misting nozzle 10 wherein the method is practiced by supplying fresh water under a pressure of between about 200-1000 psi and by providing mist of water droplets having a maximum cross-sectional dimension of between 5-100 microns in the space. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Marcus by replacing the nozzles of Marcus with a nozzle that provides a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns in the space and supplying water under a pressure of between about 200-1000 psi as taught by Kennedy et al. since Kennedy et al. teach that such methods are known in the art.

6. Claims 9-12, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus in view of Kennedy et al.

Marcus discloses a method of cooling a space or humans within the space on a watercraft in an aesthetically acceptable manner by supplying fresh water through a substantially rigid, elongated structural element 30 of the watercraft to a plurality of nozzles 34 mounted in the structural element and directly misting the fresh water into the space through the nozzles as a mist of water droplets. Kennedy et al. teaches a method of cooling a space or living being within the space comprising at least one misting nozzle 10 wherein the method is practiced by supplying fresh water under a pressure of between about 200-1000 psi and by providing mist of water droplets having a maximum cross-sectional dimension of between 5-100 microns in the space. It would have been obvious to one having ordinary skill in the art at the time the invention was

made to have modified the device of Marcus by replacing the nozzles of Marcus with nozzles that provides a mist of water droplets having a maximum cross-sectional dimension of between about 5-100 microns in the space and supplying water under a pressure of between about 200-1000 psi as taught by Kennedy et al. since Kennedy et al. teach that such methods are known in the art. The conditions recited in claim 12 are matters of user preference depending on a desired comfort level.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marcus in view of Terrell et al.

Terrell et al. teaches a misting system for supplying a mist of liquid into a space 14 comprising a substantially water-tight passage-containing element and a nozzle 30 as recited and a source of liquid under super-atmospheric pressure operatively connected to the passage-containing element wherein the nozzle has at least one orifice with a diameter of between 0.2 and 0.5 mm as recited in claim 18 and wherein the source of liquid comprises a source of fresh water at a pressure of between about 200-1000 psi and operatively connected through a regulator to the passage-containing element as recited in claim 19. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Marcus by replacing the nozzles of Marcus with nozzles having a diameter of between about 0.2-0.5 mm and supplying water under a pressure of between about 200-1000 psi as taught by Terrell et al. since Terrell et al. teach that such methods are known in the art.

8. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy et al. in view of Elston.

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Kennedy et al. discloses a misting system comprising an element 17 capable of withstanding at least 100 psi of liquid flowing therein, at least one internally threaded opening as recited, a misting nozzle 10 including a shaft having an externally threaded portion as recited, the misting nozzle externally threaded portion directly operatively engaging the internally threaded portion. Elston teaches a nozzle 46 engaged in a bore 24 with the interposition of an o-ring 76 to provide a seal against leakages. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the device of Kennedy et al. by incorporating a seal as taught by Elston to prevent leakages.

#### ***Allowable Subject Matter***

9. Claims 27-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis D. Hwu whose telephone number is 571-272-4904. The examiner can normally be reached on 8:00-4:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davis Hwu



**DAVIS HWU**  
**PRIMARY EXAMINER**